

# The erosion resistance of tool alloys in foundry melt the Zamak 4 - 1

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## Abstract

The paper considers the resistance against erosion dissolution in the melt of foundry Zamak 4 - 1 die steels used for press machine parts manufacturing for injection molding, and hard alloys system WC - Co. It is established that the solubility in the melt Zamak - 4 - 1 steel of 4H5MFS and DI - 22 are promising for the parts fabrication of metal-wire casting machines of CLT and IDRA types. A significant reserve to increase the resistance of metal wires is the use of cast steel, as well as in electroslag and electro-beam remelting options. Metal-ceramic alloy doped with chromium VK25H may be recommended for reinforcement of heavily loaded parts of the press-nodes of hot casting machines under pressure.

<http://dx.doi.org/10.1088/1757-899X/134/1/012033>

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